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chrome alloy, alumina ceramic or zirconia ceramic. However, those of skill in the art will appreciate that any material can be used for this or the other components of a total knee implant while remaining within the scope of the present invention.

The exemplary tibial components may be fabricated from a biocompatible material such as, without limitation, polyethylene, ultra high molecular weight polyethylene, highly cross-linked ultra high molecular weight polyethylene, a ceramic, and any biocompatible metal.

While the foregoing exemplary embodiments have been described to have a separable tibial tray and a tibial tray insert, it is to be understood that the tibial tray may include condyle receiver bearing surfaces that obviate the need for a separate tibial tray insert.

Following from the above description and invention summaries, it should be apparent to those of ordinary skill in the art that, while the methods and apparatuses herein described constitute exemplary embodiments of the present invention, the invention contained herein is not limited to this precise embodiment and that changes may be made to such embodiments without departing from the scope of the invention as defined by the claims. Additionally, it is to be understood that the invention is defined by the claims and it is not intended that any limitations or elements describing the exemplary embodiments set forth herein are to be incorporated into the interpretation of any claim element unless such limitation or element is explicitly stated. Likewise, it is to be understood that it is not necessary to meet any or all of the identified advantages or objects of the invention disclosed herein in order to fall within the scope of any claims, since the invention is defined by the claims and since inherent and/or unforeseen advantages of the present invention may exist even though they may not have been explicitly discussed herein.

What is claimed is:

1. A total knee implant prosthesis comprising:
 - a posterior ligament retaining femoral component including a pair of condyles interposed by an opening, the femoral component being free from any posterior cam; and
 - a posterior ligament retaining tibial component, the tibial component including a pair of condyle depressions; wherein:
 - one of the components includes a post having an anterior surface and the other of the components includes an anterior cam having an anterior surface;
 - the anterior cam and post are sized, shaped and positioned so that the anterior cam and the anterior surface of the post are engaged when the knee is fully extended and the anterior cam and the anterior surface of the post are disengaged during at least part of flexion of the knee.
2. The total knee implant prosthesis of claim 1, wherein the tibial tray insert is a mobile bearing insert.
3. The total knee implant prosthesis of claim 1, wherein the tibial component includes a tibial tray and a tibial tray insert and wherein the tibial tray insert is a fixed bearing insert.

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4. The total knee implant prosthesis of claim 1, wherein the tibial component includes a tibial tray and a tibial tray insert and wherein:

the tibial tray insert includes the pair of condyle depressions; and

the tibial tray includes the post.

5. The total knee implant prosthesis of claim 4, wherein the post is separable from both the tibial tray insert and the tibial tray.

6. The total knee implant prosthesis of claim 1, wherein: the tibial tray insert includes the pair of condyle depressions; and

the tibial tray insert includes the post.

7. The total knee implant prosthesis of claim 6, wherein the post is separable from both the tibial tray insert and the tibial tray.

8. The total knee implant prosthesis of claim 1, wherein: the tibial tray insert comprises independent pieces;

a first independent piece includes a medial condyle depression of the pair of condyle depressions; and

a second independent piece includes a lateral condyle depression of the pair of condyle depressions;

wherein at least one of the first independent piece and the second independent piece is mobile bearing with respect to the tibial tray.

9. The total knee implant prosthesis of claim 1, wherein an anterior surface of the post is planar and substantially vertical.

10. The total knee implant prosthesis of claim 1, wherein an anterior surface of the post is sloped upward from anterior to posterior.

11. The total knee implant prosthesis of claim 1, wherein an anterior surface of the post is substantially planar and angled to face toward a first of the pair of condyle depressions and away from a second of the pair of condyle depressions.

12. The total knee implant prosthesis of claim 1, wherein an anterior surface of the post includes a helical groove.

13. The total knee implant prosthesis of claim 12, wherein an anterior surface of the anterior cam includes a projection to be received within the helical groove.

14. The total knee implant prosthesis of claim 1, wherein an anterior surface of the post includes a helical projection.

15. The total knee implant prosthesis of claim 14, wherein the helical projection is at least one of symmetrical and asymmetrical.

16. The total knee implant prosthesis of claim 1, wherein an anterior surface of the post is sloped upward from posterior to anterior.

17. The total knee implant prosthesis of claim 1, wherein an anterior surface of the anterior cam is rounded.

18. The total knee implant prosthesis of claim 1, wherein an anterior surface of the anterior cam is planar.

19. The total knee implant prosthesis of claim 1, wherein an anterior surface of the anterior cam includes a helical groove.

20. The total knee implant prosthesis of claim 19, wherein the anterior surface of the post includes a projection to be received within the helical groove.

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